

We claim:

1. A method for determining the quality of a digital image of a document comprising:

providing a digital image of a document, the digital image including a plurality of black and white pixels arranged in rows;

locating at least two predefined portions of the digital image;

calculating a confidence level for each of the predefined portions of the digital image by comparing the total number of pixels located in the predefined portion to an expected number of pixels;

calculating a text confidence level by identifying groups of touching pixels;

calculating an image profile confidence level by identifying the mean number of black pixels per row, the standard deviation of the distribution of black pixels in each row; the black pixel density, and selecting the smaller of the standard deviation of black pixels in each row and the black pixel density;

creating an image confidence level as the product of the confidence levels for the predefined portions, the text confidence level and the image profile confidence level; and

comparing the calculated image confidence level to a threshold level for determining whether the digital image is acceptable.

2. The method of claim 1 wherein the document is a bank check and locating the at least two predefined portions of the digital image includes locating the payee line of the check and the legal amount text of the check.

3. A method for determining the quality of a digital image of a document comprising:

providing a digital image of a document, the digital image including a plurality of black and white pixels arranged in rows;

creating an image profile confidence level by identifying the mean number of black pixels per row, the standard deviation of the distribution of black pixels in each row, the black pixel density, and selecting the smaller of the standard deviation of the distribution of black pixels in each row and the black pixel density;

identifying text fields of the digital image;

determining the number of black pixels in each located text field to identify a character mass for each located text field;

reducing the image profile confidence level if the character mass is greater than a minimum character mass to calculate an updated image profile confidence level for each of the located text fields;

determining the number of broken characters in each located text field;

reducing the updated image profile confidence level by a percentage of the number of broken characters compared to the total number of characters for each located text field;

locating lines within the document image;

calculating a line area confidence level as a ratio of the number of pixels in characters located above the line in each of the located text fields to an expected number of pixels;

calculating a new profile confidence level as the product of the prior updated

profile confidence level and the line area confidence level for each of the located text fields;

setting the overall document confidence level to the minimum of the new profile confidence levels for all located text fields; and

comparing the overall document confidence level to a threshold level for determining whether the digital image is acceptable.

4. The method of claim 3 wherein the document is a bank check and the text fields are selected from the group consisting of: payee name, legal amount, courtesy amount, date and signature.